Gen. Pharmac. Vol. 27, No. 8, pp. III–XXIII, 1996
Copyright © 1996 Elsevier Science Inc.
Printed in the USA.

ISSN 0306-3623/96 $15.00 + .00
PII S0306-3623(96)00150-4
All rights reserved

Contents of Volume 27

Vol. 27 No. 1

Editorial

R. J. Walker — 1 — IUPHAR Guidelines

Reviews

Hiroshi Takeuchi, Yoko Araki, Muhammad Emaduddin, Wei Zhang, Xiao Yan Han, Thucydides L. Salunga and Shu Min Wong — 3 — Identifiable *achatina* giant neurones: their localizations in ganglia, axonal pathways and pharmacological features

Jan F. Klinker, Katharina Wenzel-Seifert and Roland Seifert — 33 — G-protein-coupled receptors in HL-60 human leukemia cells

J. N. Sharma, K. Uma, A. R. Noor and A. R. A. Rahman — 55 — Blood pressure regulation by the kallikrein-kinin system

Short Communication

J. P. Rault, N. Hasselot, C. Renard, V. Cheminel and J. F. Chaulet — 65 — Unreliability of saliva samples for monitoring chloroquine and proguanil levels during anti-malarial chemoprophylaxis

General Papers

Csaba Pankucsi, András Varró, and Péter P. Nánási — 69 — Three distinct components of the negative inotropic action of lidocaine in dog purkinje fiber

Kazuo Kimura, Kumatoshi Ishihara, Takeshi Tagawa, Minako Sakurai, Yoshiaki Fujii, Sumiko Dote, Tomohiro Naruse, Masashi Sasa and Kazuhiko Namba — 73 — Effects of a newly developed transdermal clonidine delivery system (M-5041T) on EEG sleep-wake cycle in relation to plasma concentration in rabbits

Hans Kröger, Monika Klewer, Regina Grätz, Annette Dietrich, Wilhelm Ehrlich, Sabine Altrichter, Maciej Kurpisz and Ralf Miesel — 79 — Influence of diet free of NAD-precursors on acetaminophen hepatotoxicity in mice

Seikwan Oh and Patrick P. McCaslin — 83 — Kainate produces concentration-dependent elevation of glutamate release but not cGMP levels in cultured neuron

Özlem Yavuz, Ipek Türktaş and Cemal Çevik — 89 — The effect of high-dose inhaled budesonide on lipid profile in asthmatic patients

Krishnamurthy P. Gudehithlu and Hemendra N. Bhargava — 91 — Differential binding of [^{3}H]MK-801 to brain regions and spinal cord of mice treated chronically with morphine

Carlo Alberto Maggi, Paolo Santiciolo and Sandro Giuliani — 95 — Effect of exercise and 2-deoxyglucose on the K^+ channel opener action of CGRP in the guinea pig ureter

Yuji Ueno, Seiji Okazaki, Masafumi Isogaya, Shintaro Nishio, Hikaru Tanaka, Yoshimitsu Kato and Koki Shigenobu — 101 — Positive inotropic and chronotropic effects of beraprost sodium, a stable analogue of prostacyclin, in isolated guinea pig myocardium

T. Yamato, M. Aomine, H. Noto, M. Ikeda and C. Ohta — 105 — Capsaicin does not inhibit the intracellular calcium handling process in rat ventricular papillary muscle

Richard B. Walker, Lawrence D. Fitz, Lance M. Williams and Yolanda M. McDaniel — 109 — The effect on ephedrine prodrugs on locomotor activity in rats

M. R. Domenici, R. Longo and S. Sagratella — 113 7-chlorokynurenic acid prevents *in vitro* epileptiform and neurotoxic effects due to kainic acid

S. Okabe, K. Amagase, H. Fujita, K. Iwata, N. Satake and S. Shibata — 117 Vasoinhibitory effect of leminoprazole, a H^+,K^+-ATPase inhibitor, on rat aortic rings

Akinao Niitsuma, Masaatsu K. Uchida and Tamiko Suzuki-Nishimura — 123 Benzalkonium chloride inhibited the histamine release from rat peritoneal mast cells induced by bradykinin and GlcNAc oligomer-specific lectin *datura stramonium* agglutinin, but heparin did not

T. Yamato, M. Aomine, M. Ikeda, H. Noto and C. Ohta — 129 Inhibition of contractile tension by capsaicin in isolated rat papillary muscle

Jagdish N. Sharma and Klaus J. Wirth — 133 Inhibition of rats adjuvant arthritis by a bradykinin antagonist hoe 140 and its influence on kallikreins

Ying-Li Qu, Kentaro Sugiyama, Ayumi Yamamoto, Kenichi Watanabe and Takafumi Nagatomo — 137 Slow association of positively charged Ca^{2+} channel antagonist amlodipine to dihydropyradine receptor sites in rat brain membranes

Jwu-Mau Yang, Chao-Shun Tang, Kwong-Leung Yu, Yu-Chiao Yang, Wen-Chang Chang and Ing-Jun Chen — 141 Sodium nonivamide acetate: a non-pungently antinociceptive capsaicin derivative with unusual anti-inflammatory properties

Jiunn-Ren Wu, Sheau-Fen Fann, Jwu-Lai Yeh, Yi-Ching Lo, Teh-Yang Huang and Ing-Jun Chen — 151 Multiple sensory and functional effects of non-phenolic aminodimethylene nonivamide: an approach to capsaicin antagonist

Róża Julia Wiśniewska and Konstanty Wiśniewski — 159 The effect of cholecystokinin (CCK-33) and C-terminal fragments of cholecystokinin:CCK-8 and CCK-4 on the cardiovascular system in rats

Nurten Türközkan, Şükrü Aykol, Ayşe Bigihan, Özlem Yavuz, Banu Çayci and Fikret Doğulu — 165 The effect of 2-chloroadenosine on the ATP level Na,K ATPase activity in experimental brain ischemia of gerbil

Hans Kröger, Wilhelm Ehrlich, Monika Klewer, Regina Grätz, Annette Dietrich and Ralf Miesel — 167 The influence of antagonists of poly(ADP-ribose) metabolism on acetaminophen hepatotoxicity

M. Gutierrez, M. J. García de Boto, B. Cantabrana and A. Hidalgo — 171 Mechanisms involved in the spasmolytic effect of extracts from *sabal serrulata* fruit on smooth muscle

Yoshiaki Akimoto, Hitoshi Nishimura, Hiroaki Omata, Jun Shibutani, Kenji Kaneko, Tomonori Kawana, Takashi Kaneda, Hirotsugu Yamamoto and Akira Fujii — 177 Cefaclor concentration in pus from abscess caused by odontogenic infection after a single oral administration

Mercedes Perusquía, Ricard Hernández, Miguel A. Morales, María G. Campos and Carlos M. Villalón — 181 Role of endothelium in the vasodilating effect of progestins and androgens on the rat thoracic aorta

Vol. 27 No. 2

General Papers

Moriki Akiu and Hiroshi Izumi — 187 Kininogenase secretion from dispersed cells of mouse submandibular gland

Ramagopal V. Mudumbi, Lonnie L. Parmeter, Margaret S. McIntyre and H. Jeff Leighton — 193 Interaction between neurotransmitters and exogenous norepinephrine in isolated rat anococcygeus muscle

Hack-Seang Kim, Choon-Gon Jang, Woo-Kyu Park, Ki-Wan Oh, Hang-Mook Rheu, Dae Hyun Cho and Seikwan Oh — 199 Blockade by ginseng total saponin of methamphetamine-induced hyperactivity and conditioned place preference in mice

Ken-ichi Watanabe, Yukie Ochiai, Takashi Washizuka, Takayuki Inomata, Yasushi Miyakita, Masami Shiba, Tohru Izumi, Akira Shibata, Ying-Li Qu and Takafumi Nagatomo — 205 Clinical evaluation of serum amlodipine level in patients with angina pectoris

Charles D. Lox — 211 The effects of propranolol hydrochloride singularly or in conjunction with ethanol on clotting activity in the rat

F. Coudore, A. Besson, A. Eschalier, J. Lavarenne and J. Fialip	215	Plasma and brain pharmacokinetics of amitriptyline and its demethylated and hydroxylated metabolites after one and six half-life repeated administrations to rats
Mika Kähönen, Pertti Arvola, Heikki Mäkynen and Ilkka Pörsti	221	Antihypertensive therapy and arterial function in experimental hypertension
Zvonimir S. Katušić, Henry C. Lee and Eric T. Clambey	239	Crosslinked hemoglobin inhibits endothelium-dependent relaxations in isolated canine arteries
John O. Miners and Donald J. Birkett	245	The use of caffeine as a metabolic probe for human drug metabolizing enzymes
Dorte Nielsen, Christian Maare and Torben Skovsgaard	251	Cellular resistance to anthracyclines
Takeshi Yamauchi, Sumio Matzno, Teruaki Imada, Masahiro Eda, Yoshihisa Inoue and Norifumi Nakamura	257	AL0671, a new potassium channel opener, inhibits nonenzymatic glycation of protein and LDL oxidation
Randy Fenrick, Chantevy Pou, Manon Beliveau and Annick Fargin	263	The human 5-hydroxytryptamine 1A receptor differentially modulates phospholipase C and adenylyl cyclase activities
C. Amsellem, F. Gormand, R. Hosni, R.Aloui, B. Guibert, W. Czarlewski, M. Melac, M. Lagarde, M. Perrin-Fayolle and Y. Pacheco	269	Antihistamines and production of granulocyte-macrophage colony-stimulating factor and interleukin-8 by human bronchial epithelial cells *in vitro*: evaluation of the effects of loratadine and cetirizine
Maria Dolores Herrera, Antonio Zarzuelo, José Jiménez, Eliza Marhuenda and Juan Duarte	273	Effects of flavonoids on rat aortic smooth muscle contractility: structure–activity relationships
Tomoko Shirasaki, Makoto Tanaka, Makoto Muramatsu, Susumu Otono, Yoshihisa Kitamura and Yasuyki Nomura	279	Partial characterization of binding sites of VA-045, a novel apovincaminic acid derivative, in rat brain membranes
Yoshihisa Kitamura, Takashi Arima, Yoshinori Kitayama and Yarsuryuki Nomura	285	Regulation of $[Ca^{2+}]_i$ rise activated by doxepin-sensitive H1-histamine receptors in Jurkat cells, cloned human T lymphocytes
S. Martínez-Sanchis, P. F. Brain, A. Salvador and V. M. Simón	293	Long-term chronic treatment with stanozolol lacks significant effects on aggression and activity in young and adult male laboratory mice
Daniel Ricci and Carlos Alberto Taira	299	Brain, α_1 adrenoceptor in the cardiovascular responses of BHT-920 and phenylephrine
Mahmoud Loghman-Adham	305	Use of phosphonocarboxylic acids as inhibitors of sodium-phosphate cotransport
Hiromi Ishimoto, Isao Matsuoka, Hironori Nakanishi and Norimichi Nakahata	313	A comparative study of arachidonic acid metabolism in rabbit cultured astrocytes and human astrocytoma cells (1321N1)
Hiroyasu Satoh	319	Modulations of Ca^{2+}-Activated K^+ current by isoprenaline, carbachol, and phorbol ester in cultured (and fresh) rat aortic vascular smooth muscle cells
M. Q. Paiva, M. J. Santos and S. Guimarrães	325	Pre- and postjunctional effects of 5-hydroxytryptamine in dog cephalic veins of neonates
A. N. Elias, M. R. Pandian, F. Naqvi, J. Sebag, M. A. Charles and G. Gwinup	329	Relationship between prorenin, IGF-I, IGF-binding proteins and retinopathy in diabetic patients
Yuji Ueno, Naohiro Yamada, Hiroshi Koike and Shintaro Nishio	333	Effects on beraprost sodium and prostaglandin E_1 on skin blood flow in diabetic rats and normal dogs
Hikaru Tanaka, Haruko Masumiya, Yoshimitsu Kato and Koki Shigenobu	337	Inhibitory effects of terfenadine on the rising phase of action potentials and sinus rates isolated guinea-pig myocardium
Carlo Alberto Maggi, Paolo Sancticioli and Sandro Giuliani	341	Protein kinase A inhibitors selectively inhibit the tonic contraction of the guinea pig ureter to high potassium

B. H. Ali and A. K. Bashir — 349 Effect of superoxide dismutase treatment on gentamicin nephrotoxicity in rats

G. Keith Matheson, Beat U. Raess and Godfrey Tunnicliff — 355 Effects of repeated doses of azapirones on rat brain 5-HT_{1A} receptors and plasma coricosterone levels

Cora Ke Chen and Cecil R. Pace-Asciak — 363 Vasorelaxing activity of resveratrol and quercetin in isolated rat aorta

Charles D. Lox — 367 Biochemical effects in women following one year's exposure to a new triphasic contraceptive—I. chemistry profiles

Charles D. Lox — 371 Biochemical effects in women following one year's exposure to a new triphasic contraceptive—II. coagulation profiles

Masahiko Saito, Gregory Broderick, Alan J. Wein and Robert M. Levin — 375 Effect of alteration in the extracellular potassium and calcium on field-stimulated relaxation of the rabbit corpus cavernosum

Sheila A. Doggrell and Brett E. Bishop — 379 Effects of potassium channel blockers on the action potentials and contractility of the rat right ventricle

Jan G. R. Elferink and Bart E. VanUffelen — 387 The role of cyclic nucleotides in neutrophil migration

E. Sotirov, G. Dobreva, A. Noeva and M. Papasova — 395 Nitric oxide modulates cholinergic neurotransmission in cat duodenum

Róża Julia Wiśniewska and Konstanty Wiśniewski — 399 Cholecystokinin (CCK) and C-terminal fragments of CCK: effects of CCK-33, CCK-8 and CCK-4 in the cardiovascular system of diabetic rats

Vol. 27 No. 3

Reviews

Max R. Bennett and Krystel R. Huxlin — 407 Neuronal cell death in the mammalian nervous system: the calmortin hypothesis

E. Smitskamp-Wilms, H. R. Hendriks and G. J. Peters — 421 Development, pharmacology, role of DT-diaphorase and prospects of the indoloquinone EO9

General Papers

R. R. Chattopadhyay — 431 Possible mechanism of antihyperglycemic effect of *Azadirachta indica* leaf extract. Part IV

Seiji Kaku, Shinya Yano, Tomihisa Kawasaki, Yumiko Sakai, Ken-ichi Suzuki, Koji Kawamura, Yasuhiko Masuho, Noboru Satoh, Toichi Takenaka, Nicholas F. Landolfi and Man Sung Co — 435 Comparison of the antiplatelet agent potential of the whole molecule, $F(ab')_2$ and Fab fragments of humanized anti-GPIIb/IIIa monoclonal antibody in monkeys

Miwa Misawa, Junya Sato, Yuko Furukawa, Yoshihiko Chiba and Tomokazu Hosokawa — 441 Abnormal modulation of cholinergic neurotransmission by opioid in hyperresponsive bronchus of rats

Hong-Won Suh, Dong-Keun Song, Myung-Bok Wie, Jun-Sub Jung, Hee-Eun Hong, Sung-Ran Choi and Yung-Hi Kim — 445 The reduction of antinociceptive effect of morphine administered intraventricularly is correlated with the decrease of serotonin release from the spinal cord in streptozotocin-induced diabetic rats

Hikaru Tanaka, Haruko Masumiya, Toshiyuki Sekine, Toshinori Sijuku, Motoko Sugahara, Haruyori Taniguchi, Miyuki Terada, Wataru Saito and Koki Shigenobu — 451 Myocardial and vascular effects of efonidipine *in vitro* as compared with nifedipine, verapamil and diltiazem

Hiroyasu Satoh — 455 Enhancement of K^+ currents by stimulation of protein kinase C in the uterine smooth muscle cells of the pregnant rat

Masakazu Nishimura, Tetsuya Hasegawa and Katsuaki Ito — 459 Twitch responses dependent on external calcium ions in the mouse diaphragm in a potassium-free bathing solution

Masao Moroi, Masayuki Fukazawa, Michiro Ishikawa, Jo Aikawa, Atsushi Namiki and Tetsu Yamaguchi — 463 Effect of endothelin on angiotensin converting enzyme activity in cultured vascular smooth muscle cells

M. Matuszek and I. T. Gągało — 467 The effect of N^6-cyclohexyladenosine and 5′-N-ethylcarboxamidoadenosine on body temperature in normothermic rabbits

Tatsushi Shinzato, Michio Shimabukuro, Satoshi Higa, Fumio Nagamine, Keiji Murakami and Nobuyuki Takasu — 471 Effect of gliclazide on the functional response to calcium in diabetic rat heart

Satomi Kagota, Yu Yamaguchi, Kazumasa Shinazuka, Young Mi Kwon and Masaru Kunitomo — 477 Cigarette smoke-modified low density lipoprotein impairs endothelium-dependent relaxation in isolated rabbit arteries

Mitsuyo Saito, Junichi Chihara, Toshiko Mouri, Dai Kurachi, Takahiro Yamamoto and Shigenori Nakajima — 483 Elevated local production of neopterin from alveolar macrophages in patients with internal lung diseases

Wei Zhang, Guo Jun Liu, Hiroshi Takeuchi and Masayasu Kurono — 487 Effects of L-glutamic acid and its agonists on snail neurones

Wei Zhang, Hiroshi Takeuchi and Masayasu Kurono — 499 Pharmacological characteristics of an outward current produced by β-hydroxy-L-glutamic acid on a snail neurone

S. Espiridião, R. M. Oliveira-Filho, A Doine, M. S. Simões, G. R. A. Focchi, J. Evêncio Neto, B. I. Kopelman and L. Kulay Jr. — 505 Morphological and biochemical action of dipyrone on rat placenta

Min Zhao, Xuenong Bo, Constance F. Neely and Geoffrey Burnstock — 509 Characterization and autoradiographic localization of [^{3}H]α,β-methylene ATP binding sites in cat urinary bladder

T. Nasu, H. Oosako and H. Shibata — 513 Dantrolene blocks the tonic contraction and calcium influx evoked by K^+ in ileal longitudinal smooth muscle

I. Ay, M. Tuncer and R. Onur — 519 Effects of Androctonus crassicauda scorpion venom on endothelium-dependent and -independent vascular responses of rabbit aorta

Nahid Radjaee-Behbahani, Ahmad Reza Dehpour, Emadeddin Tajkhorshid and Kolsoum Kheirollahi — 525 Clonidine-induced rhythmic activity in rabbit anococcygeus muscle

Milovan K. Krstić, Radica Stepanović, Katarina Ilić and Svetislav K. Krstić — 529 Endothelium-independent contractile and relaxant responses to histamine in the rabbit aorta and common carotid, mesenteric, renal, and femoral arteries

Hiroko Tanaka, Ichiro Wakabayashi, Kunihiro Sakamoto and Eizo Kakishita — 535 Mechanism of the potentiating effect of NH_4Cl on vasoconstriction in rat aorta

Nduna Dzimiri, Azadali Moorji, Mrinalini Kumar, Soleman Bakr, Naresh Kumar, Abdulrahman A. Almotrefi and Zohair Halees — 539 Effect of left ventricular pressure and volume overload on α-adrenoceptor activity in patients with rheumatic heart valvular disease

V. Motilva, M. J. Martín, M. I. Luque and C. Alarcón de la Lastra — 545 Role of polymorphonuclear leukocytes and oxygen-derived free radicals in chronic gastric lesion induced by acetic acid in rat

László Virág, Ottó Hála, Anita Marton, András Varró and Julius Gy. Papp — 551 Cardiac electrophysiological effects of levosimendan, a new calcium sensitizer

Vol. 27 No. 4

Reviews

Hideo Kanaide — 559 Endothelin regulation of vascular tonus

Paul J. Thornalley — 565 Pharmacology and methylglyoxal: formation, modification of proteins and nucleic acids, and enzymatic detoxification—a role in pathogenesis and antiproliferative chemotherapy

Bertil Waldeck	575	Some pharmacodynamic aspects on long-acting β-adrenoceptor agonists
Justine S. Thompson and Alyn H. Morice	581	Neutral endopeptidase inhibitors and the pulmonary circulation
Sumalee Kamchonwongpaisan and Steven R. Meshnick	587	The mode of action of the antimalarial artemisinin and its derivatives
L. H. Thomas and J. A. Warner	593	The eosinophil and its role in asthma
Janet C. Wanstall	599	The pulmonary vasodilator properties of potassium channel opening drugs
Susan D. Brain and Heather Cambridge	607	Calcitonin gene-related peptide: vasoactive effects and potential therapeutic role
James A. Thorn and Simon M. Jarvis	613	Adenosine transporters
General Papers		
F. Liu, V. E. C. Ooi, W. K. Liu and S. T. Chang	621	Immunomodulation and antitumor activity of polysaccharide-protein complex from the culture filtrates of a local edible mushroom, *Tricholoma lobayense*
Hiroyasu Satoh	625	Direct inhibition by Taurine of the ATP-sensitive K^+ channel in guinea pig ventricular cardiomyocytes
Sheue-Jiun Chen, Ming-Hsin Wang and Ing-Jun Chen	629	Antiplatelet and calcium inhibitory properties of eugenol and sodium eugenol acetate
Silvia I. Wikinski, Gabriela B. Acosta and Modesto C. Rubio	635	Valproic acid differs in its *in vitro* effect on glutamic acid decarboxylase activity in neonatal and adult rat brain
Ana María Silván, María José Abad, Paulina Bermejo, Angel María Villar and Juan Pedro López-Bote	639	Aggravation of adjuvant arthritis by carrageenan
Giovambattista De Sarro, Maria C. Liberto, Maria C. Berlinghieri, Alfredo Foca, Marcello Aragona, Riccardo Cavaliere and Elio Gulletta	643	Impairment of immunological functions in genetically epilepsy-prone rats
Adriana Regina Rigon and Reinaldo Naoto Takahashi	647	The effects of systemic procaine, lidocaine and dimethocaine on nociception in mice
Omokere E. Odje and James M. Ramsey	651	Effect of adrenaline on the response of erythrocyte 2,3-diphosphoglycerate in rabbits *in vivo*
Takio Kitazawa, Sayori Kikui, Tetsuro Taneike and Akira Ohaga	655	Does motilin stimulate the gastrointestinal motility of the pig? *In vitro* study using smooth muscle strips and dispersed muscle cells
Andrew L. Melnikov, Jan E. Løkebø, David A. Lathrop and Knut G. Helgesen	665	Alteration of the cardiac effects of isoproterenol and propranolol by hypothermia in isolated rat atrium
A. F. E. Rump, S. Botvinik-Helling, M. Theisohn, W. Biederbick, J. M. Schierholz, M. Stemmler, R. Fischbach, W. Heindel, K. Lackner and W. Klaus	669	Pharmacokinetics of intraarterial mitomycin C in the chemoembolisation treatment of liver metastases
G. Engelhardt, D. Homma, K. Schlegel, Chr. Schnitzler and R. Utzmann	673	General pharmacology of meloxicam—part I. effects on CNS, gastric emptying, intestinal transport, water, electrolyte and creatinine excretion
G. Engelhardt, D. Homma, K. Schlegel, Chr. Schnitzler and R. Utzmann	679	General pharmacology of meloxicam—part II. effects on blood pressure, blood flow, heart rate, ECG, respiratory minute volume and interactions with paracetamol, pirenzepine, chlorthalidone, phenprocoumon and tolbutamide
Norio Matsuki, Katsuya Higo, Hiroshi Saito and Ken Nakazawa	689	Regional difference in sympathetic neurotransmitter- and Ca^{2+} channel-mediated responses in rat vas deferens
Pasquale Pagliaro, Rodolfo Dalla Valle, Donatella Gattullo, Angelo Merletti and Neville A. Marsh	695	The heart rate after inhibition of nitric oxide release in the anaesthetized dog

N. Satake, S. Fujimoto and S. Shibata — 701 The potentiation of nitroglycerin-induced relaxation by PKG inhibition in rat aortic rings

A. Capasso, A. Di Giannuario, A. Loizzo, S. Pieretti and L. Sorrentino — 707 Actinomycin D blocks the reducing effect of dexamethasone on amphetamine and cocaine hypermotility in mice

J. R. S. Hoult and Miguel Payá — 713 Pharmacological and biochemical actions of simple coumarins: natural products with therapeutic potential

Guido Pesce and Francis Hery — 723 Resolution of multiple affinity states of 5-hydroxytryptamine-1A receptors labelled by [^{3}H]-8-hydroxy-2-(DI-n-propilamino) tetralin in rat hippocampal membranes

S. S. Rubakhin, A. Szűcs and K. S.-Rózsa — 731 Characterization of the GABA response on identified dialysed *lymnaea* neurons

Luis de Medinaceli — 741 Statistical analyses and reliability of the sciatic functional index

Vol. 27 No. 5

Reviews

L. M. Mir, O. Tounekti and S. Orlowski — 745 Bleomycin: revival of an old drug

R. Zucchi — 749 Effect of gallopamil on excitation-contraction coupling

I. Kodama, K. Maruyama, R. Suzuki, H. Honjo and J. Toyama — 755 Electropharmacology of Ro 22-9194, a new antiarrhythmic agent

B. L. Slomiany, V. L. N. Murty, J. Piotrowski and A. Slomiany — 761 Salivary mucins in oral mucosal defense

General Papers

Toru Egashira, Fusako Takayama and Yasumitsu Yamanaka — 773 Effects of long-term treatment with dicyclic, tricyclic, tetracyclic, and noncyclic antidepressant drugs on monoamine oxidase activity in mouse brain

Hiroaki Nishio, Yasuko Kohno, Akiko Fujii, Yuuji Negishi, Atsuko Inoue and Yoshihiro Nakata — 779 5-HT$_3$ receptor blocking properties of the antiparkinsonian agent, talipexole

V. Cunha, J. Gutierrez and F. M. A. Corrêa — 787 Biologic activities of iodinated analogues of Tyr^0-bradykinin and bradykinin-ile^{10}Tyr^{11} assessed in the rat uterus and the guinea pig ileum

N. Paulino, V. C. Filho, M. G. Pizzolatti, R. A. Yunes and João B. Calixto — 795 Mechanisms involved in the contractile responses induced by the hydroalcoholic extract of *Phyllanthus urinaria* on the guinea pig isolated trachea: Evidence for participation of tachykinins and influx of extracellular Ca^{2+} sensitive to ruthenium red

F. Coudoré, A. Besson, C. Courteix, A. Eschalier, J. Lavarenne and J. Fialip — 803 Pharmacokinetics of amitriptyline and its demethylated and hydroxylated metabolites in streptozocin-induced diabetic rats

H. Huddart and R. B. Hill — 809 Modulatory mechanisms in the isolated internally perfused ventricle of the whelk *Busycon canaliculatum*

H. Huddart and R. B. Hill — 819 Ionic dependency of membrane potential and autorhythmicity in the atrium of the whelk *Busycon canaliculatum*

Sachiko Tanihata and Toshimitsu Uchiyama — 827 Role of nitric oxide in nonadrenergic, noncholinergic relaxation of whole tracheal tube preparations isolated from guinea pigs

Yukihisa Murakami, Kinzo Matsumoto, Hiroyuki Ohta and Hiroshi Watanabe — 833 Effects of oxotremorine and pilocarpine on striatal acetylcholine release as studied by brain dialysis in anesthetized rats

S. G. James, G. J. Appleby, K. A. Miller, J. T. Steen, E. Q. Colquhoun and M. G. Clark — 837 Purine and pyrimidine nucleotide metabolism of vascular smooth muscle cells in culture

T. J. Hall, H. Nyugen, M. Schaeublin, M. Michalsky and M. Missbach — 845 Phenothiazines are potent inhibitors of osteoclastic bone resorption

K. Takeuchi, T. Yasuhiro, Y. Asada, S. Kato and Y. Ishihara — 849 Stimulation of acid secretion in rat stomach following exposure to taurocholate in the presence of the nitric oxide synthase inhibitor

J. P. De la Cruz, C. Olveira, J. A. Gonzalez-Correa, A. Benítez and F. Sánchez de la Cuesta — 855 Inhibition of ferrous-induced lipid peroxidation by dipyridamole, RA-642 and mopidamol in human lung tissue

B. M. Paddle and M. H. Dowling — 861 Blockade of cardiac nicotinic responses by anticholinesterases

M. Floreani, A. Forlin, S. Bellin and F. Carpenedo — 873 Cardiac sarcoplasmic reticulum Ca^{2+} pump as a target for benzoquinones

A. Hidalgo, R. C. Suzano, M. P. Revuelta, C. Sánchez-Diaz, A. Baamonde and B. Cantabrana — 879 Calcium and depolarization-dependent effect of pregnenolone derivatives on uterine smooth muscle

A. R. Dehpour, N. Shirzad, P. Ghafourifar and M. Abdollahi — 887 Effects of cyclosporine A on the functions of submandibular and parotid glands of rats

M. Koleva and P. Alov — 891 Effect of multiple administration of calcium antagonists on lipid peroxidation in rat liver microsomes

B. Okopien and H. I. Trzeciak — 895 Modification of adrenergic reactivity in rat tail artery by dietary lipids and calcium channel antagonists

B. Witek, J. Legath, A. Kolataj, O. Kalinska, A. Banasik and M. Bienka-Michalik — 901 The effect of small doses of mercury on the level of selected lysosomal enzymes in the plasma and lymphocytes of sheep

S. Horie, T. Maruyama, Shingo Yano and K. Watanabe — 905 Neurogenic stimulation of gastric acid secretion by the Na^+, K^+-ATPase inhibitor ouabain in mouse isolated stomach

S. Weinschelbaum-Jairala, J. Elena Ochoa and M. M. Elías — 911 Influence of trifluoperazine and verapamil on the isolated perfused rat kidney

Z. B. Fortes, C. Becker, M. A. Oliveira and R. Scivoletto — 917 Influence of aldose reductase inhibition on the microvascular reactivity in experimental diabetes

Vol. 27 No. 6

Reviews

S. Latini, M. Pazzagli, G. Pepeu and F. Pedata — 925 A_2 adenosine receptors: their presence and neuromodulatory role in the central nervous system

G. De Sarro, R. Gitto, M. Rizzo, M. Zappia and A. De Sarro — 935 1,4-benzodiazepine derivatives as anticonvulsant agents in DBA/2 mice

Jan Bondeson — 943 Effects of tenidap on intracellular signal transduction and the induction of proinflammatory cytokines: a review

General Papers

Kenji Honda, Yukio Takano and Hiro-o Kamiya — 957 Involvement of protein kinase C in muscarinic agonist-induced contractions of guinea pig ileal longitudinal muscle

A. Bell, H. C. Roberts and L. H. Chappell — 963 The antiparasite effects of cyclosporin A: possible drug targets and clinical applications

R. Blanqué, C. Meakin, S. Millett and C. R. Gardner — 973 Hypothermia as an indicator of the acute effects of lipopolysaccharides: comparison with serum levels of IL1β, IL6, and TNF α

A. H. Gilani, K. H. Janbaz and M. S. Akhtar — 979 Selective protective effect of an extract from *Fumaria parviflora* on paracetamol-induced hepatotoxicity

H. Izumi, Y. Tanaka, Y. Okada, N. Ogawa and T. Izawa — 985 Structure-activity relationship of a novel K^+ channel opener, KRN4884, and related compounds in porcine coronary artery

C. K. Miyasaka, R. B. Azevedo, R. Curi, J. M. Filho and F. M. Lajolo — 991 Administration of fish oil by gavage increases the activities of hexokinase, glucose-6-phosphate dehydrogenase, and citrate synthase in rat lymphoid organs

A. Fujii, H. Matsumoto and H. Yamamoto	995	Effect of vitamin B complex on neurotransmission and neurite outgrowth
R. L. McLeod, S. B. Gertner and J. A. Hey	1001	Hemodynamic profile of activation of histamine H_3 receptors by R-α-methylhistamine in the guinea pig
A. M. Buzaleh and A. M. del Carmen Batlle	1009	Strain and sex differences in the effect of enflurane and isoflurane on heme metabolism in mice
S. Okuyama, S. Yamada, S.-I. Ogawa, N. Kawashima, K. Tomisawa, K. Shima and K. Kamata	1013	Effect of VA-045 on central noradrenergic neuronal system in rats
N. Dzimiri, A. Moorji, N. Kumar and Z. Halees	1019	Effects of different left ventricular load conditions on myocardial β-adrenoceptor density in patients with rheumatic heart valvular disease
A. Kumar, B. T. Shahani and A. Gulati	1025	Modification of systemic and regional circulatory effects of intracerebroventricular administration of endothelin-1 by propranolol in anesthetized rats
H. Suenaga, Y. Kasuya and K. Kamata	1035	GTP-binding protein regulates the contractile response elicited by the phorbol ester (PMA)-induced activation of protein kinase C in the isolated rat aorta
K. Grosfils, M. Métioui, S. Lenoble and J. P. Dehaye	1041	Inhibitory effect of caffeine on the response to carbachol in rat pancreatic acini
T. A. Bökesoy, S. Tastan and R. K. Türker	1047	Comparison of responses to histamine by constant-flow and constant-pressure perfusion methods in the rabbit isolated kidney preparation
E. Atanassova and M. Papasova	1053	Effect of substance P and met-enkephalin on cat colonic smooth muscle activity
J. J. Lee, C. M. Boulanger, M. Kirchengast and P. M. Vanhoutte	1057	Trandolapril plus verapamil inhibits the coronary vasospasm induced by hypoxia following ischemia-reperfusion injury in dogs
N. Moriyama, S. Kurimoto, N. Miyata, H. Yamaura, R. Yamazaki, K. Sudoh, O. Inagaki, T. Takenaka and K. Kawabe	1061	Decreased contractile effect of endothelin-1 on hyperplastic prostate
E. V. Romanova, S. S. Rubakhin and K. S.-Rózsa	1067	Behavioral changes induced by GABA-receptor agonists in *Lymnaea stagnalis* L
Short Communication		
R. V. Searles, C. D. Balaban and W. B. Severs	1073	Comparison of anterior chamber infusates on the intraocular pressure of intact rat eyes
Book Reviews	1077	

Vol. 27 No. 7

Reviews		
A. D. Hughes, G. F. Clunn, J. Refson and C. Demoliou-Mason	1079	Platelet-derived growth factor (PDGF): actions and mechanisms in vascular smooth muscle
G. Tunnicliff	1091	Basis of the antiseizure action of phenytoin
P. Melchiorri and L. Negri	1099	The dermorphin peptide family
A. Lindén	1109	NANC neural control of airway smooth muscle tone
J. P. Vanden Heuvel	1122	Perfluorodecanoic acid as a useful pharmacologic tool for the study of peroxisome proliferation
B. Nilius, J. Eggermont, T. Voets and G. Droogmans	1131	Volume-activated Cl^- channels

G. M. Lew — 1141 Tau protein after delta-9-tetrahydrocannabinol in a human neuroblastoma cell line

D. Lapenna and F. Cuccurullo — 1145 Hypochlorous acid and its pharmacological antagonism: an update picture

General Articles

G. Anfossi, P. Massucco, V. Piretto, E. Mularoni, F. Cavalot, L. Mattiello and M. Trovati — 1149 Interplay between milrinone and adenosine in the inhibition of human platelet response

G. De Sarro, A. Chimirri, M. Zappala, P. Guisti, M. Lipartiti and A. De Sarro — 1155 Azirino [1,2-*d*][1,4] benzodiazepine derivatives and related 1,4-benzodiazepines as anticonvulsant agents in DBA/2 mice

A. Doğan, C. Temiz, R. K. Türker, N. Egemen and M. K. Başkaya — 1163 Effect of prostacyclin analogue, iloprost, on infarct size after permanent focal cerebral ischemia

Hong-Won Suh, Dong-Keun Song, Kun-Ho Son, Myung-Bok Wie, Keun-Ho Lee, Keun-Young Jung, Jae-Chul Do and Yung-Hi Kim — 1167 Antinociceptive mechanisms of *Dipsacus* saponin C administered intracerebroventricularly in the mouse

Y. Sakamoto, M. Inoue and I. Imanaga — 1173 Mn^{2+}-induced transient contraction of the longitudinal muscle of guinea-pig stomach through prostaglandin synthesis

Sadaharu Usune and Tatsuo Furukawa — 1179 Effects of SC-52458, a new nonpeptide angiotensin II receptor antagonist, on increase in cytoplasmic Ca^{2+} concentrations and contraction induced by angiotensin II and K^+-depolarization in guinea-pig taenia coli

Shu-Yu Sun, Zhi Liu, Peng Li and A. J. Ingenito — 1187 Central effects of opioid agonists and naloxone on blood pressure and heart rate in normotensive and hypertensive rats

Masatoshi Kato, Kyoji Taguchi, Yukihiko Hagiwara and Takao Kubo — 1195 Effects of electrical stimulation and morphine microinjection into periaqueductal gray on 5-hydroxyindole oxidation current in spinal cord of cats

Kumiko Ishida, Yukihiro Ohno, Tadashi Ishibashi and Mitsutaka Nakamura — 1203 Effects of SM-9018, a novel 5-HT_2 and D_2 receptor antagonist, on electrically-evoked [^{3}H]acetylcholine release from rat striatal slices

M. Emaduddin and Hiroshi Takeuchi — 1209 Lineweaver-Burk analysis for the blocking effects of mammalian dopamine receptor antagonists on dopamine-induced currents in *Achatina* giant neurones

H. Kröger, J. Klosa, R. Grätz, A. Dietrich, W. Ehrlich and A. Wild — 1215 The therapeutic effect of a combination of cofpropamine, a caffeine derivative, and cyclophosphamide on the development of adjuvant arthritis of rats and collagen arthritis of mice

T. Bányász and T. Kovács — 1219 Insulin reversibility of the isoproterenol resistance of diabetic rat myocaridum

T. Vijayalakshmi, V. Muthulakshmi and P. Sachdanandam — 1223 Effect of the milk extract of *Semecarpus anacardium* nut on adjuvant arthritis a dose-dependent study in Wistar albino rats

Kazuhiko Nario and Hiroyasu Satoh — 1227 Cardiac mechanical and electrophysiologic modulations of guinea pig by caffeine and thapsigargin

T. B. Ng, J. M. L. Ling, Z-T. Wang, J. N. Cai and G. J. Xu — 1237 Examination of coumarins, flavonoids and polysaccharopeptide for antibacterial activity

L. Glass-Marmor, M. Chen-Zion and R. Beitner — 1241 Effects of carbamylcholine and pyridostigmine on cytoskeleton-bound and cytosolic phosphofructokinase and ATP levels in different rat tissues

H. Huddart and R. B. Hill — 1247 Electrical and mechanical characteristics of the atrium of the whelk *Busycon canaliculatum*

R. Raddino, M. Metra, S. Nodari, G. Pelá, A. Fappani and L. Dei Cas — 1255 Pharmacological activity of the new calcium antagonist, lacidipine, on isolated preparations

M. O. M. Tanira, B. H. Ali, A. K. Bashir and I. Chandranath — 1261 Some pharmacologic and toxicologic studies on *Rhazya stricta* decne in rats, mice and rabbits

G. N. Balerio and M. C. Rubio — 1269 Baclofen: intestinal absorption mechanism in mice

M. C. W. Avellar and R. P. Markus — 1273 Are imidazoline receptors involved in sympathetic neurotransmission in rat vas deferens?

Vol. 27 No. 8

Reviews

O. Fardel, V. Lecureur and A. Guillouzo — 1283 The P-glycoprotein multidrug transporter

M. E. Safar — 1293 Carotid artery stiffness with applications to cardiovascular pharmacology

A. García-Pascual, A. Labadía, D. Triguero and G. Costa — 1303 Local regulation of oviductal blood flow

P. Waring and J. Beaver — 1311 Gliotoxin and related epipolythiodioxopiperazines

J. Fischer, H. Lüllmann and R. Lüllmann-Rauch — 1317 Drug-induced lysosomal storage of sulphated glycosaminoglycans

K. Müller — 1325 Antipsoriatic anthrones: aspects of oxygen radical formation, challenges and prospects

General Papers

K. S.-Rózsa, S. S. Rubakhin, A. Szűcs and George B. Stefano — 1327 Met-enkephalin and morphiceptin modulate a GABA-induced inward current in the CNS of *Lymnaea stagnalis* L

Z.-T. Wang, T. B. Ng, H. W. Yeung and G. J. Xu — 1347 Immunomodulatory effect of polysaccharide-enriched preparation of *Codonopsis pilosula* roots

R. Aloui, F. Gormand, B. Guibert, F. Corallo, M. Perrin-Fayolle and Y. Pacheco — 1351 RU 41740 (Biostim®) stimulates the production of granulocyte macrophage colony-stimulating factor and interleukin-8 by human bronchial epithelial cells *in vitro*

S. Fujimoto and T. Itoh — 1355 Contraction and relaxation responses of femoral artery and aorta to norepinephrine in young rats

Toshiharu Oba, K. Nihonyanagi, P. Tangkawattana and M. Yamaguchi — 1361 A novel phasic contraction induced by dithiothreitol in frog skeletal muscle

Toyohiko Sakai, Ikunobu Muramatsu, Nobushige Hayashi, and Yasushi Ishii — 1367 Inhibition of NO synthase induction by an anticancer drug 4′-epi-doxorubicin in rats

L. Włodek, M. Wróbel and J. Czubak — 1373 Selective effect of 2-(polyhydroxyalkyl)-thiazolidine-4-caroboxylic acids on non-protein sulfhydryl groups in tumor bearing mice

K. Maruyama, J. Fukutomi, T. Chiba, M. Yamaguchi, M. Takeda, K. Hattori and T. Nagatomo — 1377 Two distinct α_1-adrenoceptor subtypes in the human prostate: assessment by radioligand binding assay using ^{3}H-prazosin

S. Murakami, Y. Ohta, Y. Asami, I. Yamagishi, Y. Toda, M. Sato and K. Tomisawa — 1383 The hypolipidemic action of the ACAT inhibitor HL-004 in hamsters fed normal chow

G. Csaba and Á. Inczefi-Gonda — 1387 Effect of neonatal allylestrenol treatment and adult benzpyrene treatment on the rat thymus glucocorticoid receptors

G. Morini, D. Grandi and G. Bertaccini — 1391 Comparison of the protective effect of (*R*)-α-methylhistamine and its prodrugs on gastric mucosal damage induced by ethanol in the rat

M. Raza, M. A. H. Dhariwal, A. M. Ageel and S. Qureshi — 1395 Evaluation of the antiinflammatory activity of sodium valproate in rats and mice

M. Konstandi, A. Kolijianni and A. D. Sfikakis — 1401 Effect of cyproheptadine treatment on conditioned avoidance response in female rats

R. J. Jensen	1405	The antibiotic neomycin abolishes directional selectivity in rabbit retinal ganglion cells
A. Cabanis, B. Gressier, C. Brunet, T. Dine, M. Luyckx, M. Cazin and J. C. Cazin	1409	Effect of the protein kinase C inhibitor GF 109 203X on elastase release and respiratory burst of human neutrophils
C. Alarcón de la Lastra, M. J. Martin, M. C. La Casa, A. López and V. Motilva	1415	Effects of cisapride on ulcer formation and gastric secretion in rats: comparison with rantidine and omeprazol
M. A. Vieira-Coelho, M. Pestana and P. Soares-da-Silva	1421	High sodium intake increases the urinary excretion of L-3, 4-dihydroxyphenylalanine but fails to alter the urinary excretion of dopamine and amine metabolites in wistar rats
A. Capasso, A. Di Giannuario, A. Loizzo, S. Pieretti and L. Sorrentino	1429	Dexamethasone modifies the behavioral effects induced by clonidine in mice
Book Reviews	1435	
Volume Contents	I	